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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/633,005	08/04/2000	David G. Way	FN-3120	2260

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EXAMINER

BELLO, AGUSTIN

ART UNIT	PAPER NUMBER
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2633

DATE MAILED: 09/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/633,005

Applicant(s)

WAY, DAVID G. *W*

Examiner

Agustin Bello

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7-9. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Taylor (U.S. Patent No. 5,938,309).

Regarding Claim 1, Taylor teaches a fiber optical communication system comprising multiple channels one or more of which has a variable bandwidth (e.g. OC-12, OC-48, and OC-92 channels).

Regarding Claims 8 and 12, Taylor teaches an optical communication system comprising multiple channels, wherein the spectrum width of the channels can be selectively combined into a single channel (reference numeral 20, 22, 70 in Figure 1).

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Regarding Claims 9 and 13, Taylor teaches an optical communication system comprising multiple channels, wherein the spectrum width of the channels can be selectively divided into a multiple channels (reference numeral 30, 32, 70 in Figure 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-7, 10-11, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor (U.S. Patent No. 5,938,309) in view of Lomp (U.S. Patent No. 6,175,586).

Regarding Claims 2 and 5, Taylor differs from the claimed invention in that Taylor fails to specifically teach that the bandwidth of the channels are varied using a tunable filter. However, one skilled in the art would clearly have recognized that it would have been possible to change the bandwidth of a channel using a tunable filter. Lomp, in the same field of endeavor, teaches it is well known in the art to use filters to dynamically allocate bandwidth to channels, thereby varying the bandwidth of the channels via a filter (column 3 lines 41-57). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have varied the bandwidth of the channels via a filter in order to dynamically allocate bandwidth to channels based upon need.

Regarding Claims 3 and 6, the combination of references differs from the claimed invention in that it fails to specifically teach the use of an acousto-optic tunable filter. However, acousto-optic tunable filters are very well known in the art and readily available. One skilled in

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the art would clearly have recognized that an acousto-optic tunable filter could have served as the tunable filter in the device of the combination of references. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have used an acousto-optic filter as the tunable filter in the device of the combination of references.

Regarding Claim 4, Taylor teaches a communication system wherein the input data rates are variable, but differs from the claimed invention in that Taylor fails to specifically teach that the bit rates of the channels are dynamically tunable. However, Lomp, in the same field of endeavor teaches it is well known in the art to use variable bandwidth filters to dynamically change the bit rate of the channels as required (column 3 lines 40-57). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have allowed the bit rates of the channels to be dynamically tunable in the system of Taylor according to the teachings of Lomp.

Regarding Claims 7, 10, 11, 14, and 15, Taylor teaches multiple emitters (reference numeral 20, 30, 40 in Figure 1) that couple signals into a transmission medium, and multiple modulators (22, 32, 62 in Figure 1) connected to modulate data onto one or more of the signals. Taylor differs from the claimed invention in that Taylor fails to specifically teach multiple tunable passband filters that filter one or more of the signals by selectively tuning passbands of the filters. However, one skilled in the art would clearly have recognized that it would have been possible to change the bandwidth of a channel using a tunable passband filter. Lomp, in the same field of endeavor, teaches it is well known in the art to use tunable passband filters to dynamically allocate bandwidth to channels, thereby varying the bandwidth of the channels via a filter (column 3 lines 41-57). Therefore, it would have been obvious to one skilled in the art at

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the time the invention was made to have varied the bandwidth of the channels via a filter in order to dynamically allocate bandwidth to channels based upon need.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dishman, Ichiyoshi, and Wellbrook teach bandwidth allocation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agustin Bello whose telephone number is (703)308-1393. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (703)305-4729. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9314 for regular communications and (703)872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

AB

September 14, 2002


JASON CHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600